

**BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION**

RE:	In the Matter of Implementation of)	
	The FCC's Triennial Review Order)	Docket No. 29054
	<i>(Phase II – Local Switching for Mass</i>)	
	<i>Market Customers)</i>)	Filed: January 20, 2004
)	

DIRECT TESTIMONY OF DON J. WOOD

ON BEHALF OF

AT&T COMMUNICATIONS OF THE SOUTH CENTRAL STATES, LLC

1 **I. BACKGROUND AND PURPOSE**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Don J. Wood. I am a principal in the firm of Wood &Wood, an
4 economic and financial consulting firm. My business address is 30000 Mill
5 Creek Avenue, Suite 395, Alpharetta, Georgia 30022. I provide economic and
6 regulatory analysis of the telecommunications, cable, and related convergence
7 industries with an emphasis on economic policy, competitive market
8 development, and cost-of-service issues.

9 **Q. PLEASE DESCRIBE YOUR BACKGROUND AND EXPERIENCE.**

10 A. I received a BBA in Finance with distinction from Emory University and an MBA
11 with concentrations in Finance and Microeconomics from the College of William
12 and Mary. My telecommunications experience includes employment at both a
13 Regional Bell Operating Company ("RBOC") and an Interexchange Carrier
14 ("IXC").

15 Specifically, I was employed in the local exchange industry by BellSouth
16 Services, Inc. in its Pricing and Economics, Service Cost Division. My
17 responsibilities included performing cost analyses of new and existing services,
18 preparing documentation for filings with state regulatory commissions and the
19 Federal Communications Commission ("FCC"), developing methodology and
20 computer models for use by other analysts, and performing special assembly cost
21 studies.

22 I was employed in the interexchange industry by MCI
23 Telecommunications Corporation, as Manager of Regulatory Analysis for the

1 Southern Division. In this capacity I was responsible for the development and
2 implementation of regulatory policy for operations in the southern U. S. I then
3 served as a Manager in MCI's Economic Analysis and Regulatory Affairs
4 Organization, where I participated in the development of regulatory policy for
5 national issues.

6 **Q. HAVE YOU PREVIOUSLY PRESENTED TESTIMONY BEFORE STATE**
7 **REGULATORS?**

8 A. Yes. I have testified on telecommunications issues before the regulatory
9 commissions of thirty-five states, Puerto Rico, and the District of Columbia. I
10 have also presented testimony regarding telecommunications issues in state,
11 federal, and overseas courts, before alternative dispute resolution tribunals, and at
12 the FCC. A listing of my previous testimony is attached as Exhibit DJW-1.

13 I have testified before this Commission on issues related to cost of service
14 and competitive market entry on several occasions, most recently in Docket No.
15 28841.

16 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

17 A. I have been asked by AT&T Communications of the South Central States, LLC
18 ("AT&T") to describe the framework for the type of economic impairment
19 analysis discussed by the FCC in the Triennial Review Order ("TRO").
20 Specifically, I am addressing the FCC's guidelines for an analysis of "economic
21 impairment" for local circuit switching used to provide competitive service to
22 mass market customers.

1 **II. USES AND LIMITATIONS OF AN ECONOMIC IMPAIRMENT**
2 **ANALYSIS**

3 **Q. IS THIS COMMISSION REQUIRED TO CONDUCT AN ECONOMIC**
4 **IMPAIRMENT ANALYSIS?**

5 A. Not necessarily. In the Triennial Review Order, the FCC stated: “[w]e find on a
6 national level that requesting carriers are impaired without access to unbundled
7 local switching when serving mass market customers.” TRO ¶ 419; *see also* ¶¶
8 422, 424, 459, 476, 479 and 493. Impairment exists unless and until specific,
9 concrete evidence to the contrary is identified.

10 ILECs seeking to set aside that finding of impairment may rely on the
11 “triggers” set forth in the TRO. *See* TRO ¶ 501. If the ILEC cannot establish that
12 CLECs are self-provisioning switches to serve the mass market, the ILEC may
13 attempt other means of demonstrating that there is no impairment. In that
14 instance, the Commission, if it wants to consider a finding of “no impairment,”
15 must conduct a granular analysis that includes an assessment of both operational
16 and economic impairment. *See* TRO ¶¶ 511-520.

17 **Q. CAN THIS COMMISSION MAKE A FINDING OF “NO IMPAIRMENT”**
18 **BASED ONLY ON AN ECONOMIC ANALYSIS?**

19 A. No. According to the FCC, a determination of whether lack of access to an
20 unbundled network element will “impair” a CLEC’s ability to enter the market
21 requires an analysis of “whether lack of access to an incumbent LEC network
22 element poses a barrier or barriers to entry, including operational and economic
23 barriers, that are likely to make entry into a market uneconomic.” TRO ¶ 56.
24 This Commission must analyze operational and economic factors “in concert.”
25 Clearly, if a CLEC is impaired because of operational barriers in a given market,

1 no economic analysis will change that fact. Conversely, a lack of operational
2 barriers cannot offset the existence of an economic barrier. A finding of
3 impairment must be reached if either operational *or* economic barriers are found
4 to exist. My testimony addresses only economic impairment.

5 **Q. IS IT LIKELY THAT AN “ECONOMIC IMPAIRMENT” ANALYSIS**
6 **WILL ESTABLISH THAT ECONOMIC IMPAIRMENT DOES NOT**
7 **EXIST?**

8 A. No. Since 1996, CLECs have engaged in a wide variety of entry strategies. Many
9 of these strategies have been based on an analysis of the same market-specific
10 costs and potential revenues that the FCC contemplates in its analysis. The
11 investors who funded - or elected not to fund - these entry strategies likewise
12 considered these same factors.

13 Since 1996, I have worked with CLECs in most aspects of their market
14 entry plans and have assisted investors (and potential investors) with their
15 analyses of CLEC business plans. In my experience, the individuals who
16 undertook these analyses for both carriers and investors were qualified to
17 undertake the effort and to generate meaningful results. Yet the market realities
18 (as revealed in the results of the triggers analysis) make it abundantly clear that
19 CLECs either (1) could not economically justify the deployment of their own
20 local switching equipment to serve mass market customers, and so decided not to
21 make the investment, or (2) decided (in what in hindsight proved to be a bad
22 decision) to make this investment, were unsuccessful, and are no longer
23 attempting to use this entry vehicle as a means of serving mass market customers.
24 This real-world experience of CLECs and investors over the last seven years

1 reveals that CLEC deployment of their own local circuit switching equipment to
2 serve mass market customers is not economically viable. Some previously
3 elusive formula for making it economically viable is not likely to materialize in
4 the midst of a contested state proceeding. It is even more unlikely that this
5 elusive formula will finally reveal itself in the results of a BellSouth “business
6 case” model.

7 **Q. ARE YOU SUGGESTING THAT THERE IS NO BENEFIT TO**
8 **CONDUCTING AN “ECONOMIC IMPAIRMENT” ANALYSIS?**

9 A. No. As I will describe in more detail later in my testimony, the FCC found the
10 “economic impairment” analyses that it reviewed are highly sensitive to the
11 underlying inputs and assumptions. A properly developed model, therefore, could
12 be used to gain insight into which factors make the most significant contribution
13 to the existing impairment and how changes in these factors (in terms of changes
14 due to market response over time or changes induced through changes in
15 regulatory requirements) impact the overall equation. The results of such an
16 analysis would indicate whether a specific regulatory action has the potential, on a
17 prospective basis, to reduce impairment for some markets in some circumstances.

18

19 **III. THE FCC’S ECONOMIC IMPAIRMENT GUIDANCE**

20 **Q. WHAT GUIDANCE DID THE FCC PROVIDE TO STATE**
21 **COMMISSIONS FOR CONDUCTING AN ECONOMIC IMPAIRMENT**
22 **ANALYSIS?**

23 A. In section VI.D.6.a.(i)(b) of the TRO, the FCC discusses the economic factors that
24 may be relevant to states’ determinations. The FCC focused principally on the
25 primary cost disadvantage faced by CLECs, “the cost of backhauling the voice

1 circuit to their switch from the customer's end office." The costs of backhaul
2 "include the costs of collocating in the customer's serving wire center, installing
3 equipment in the wire center in order to digitize, aggregate, and transmit the voice
4 traffic, and paying the incumbent to transport the traffic to the competitor's
5 switch" *Id.* at ¶480.

6 As shown in the testimony of Mr. Turner, this cost disadvantage is significant.
7 Indeed, in my view, it is sufficient in and of itself to create economic impairment
8 for CLECs.

9 **Q. DID THE FCC REVIEW INFORMATION PROVIDED BY CLECS AND**
10 **ILECS REGARDING OTHER ECONOMIC FACTORS?**

11 A. Yes. In its review, the FCC considered studies conducted by both ILECs and
12 CLECs. CLEC studies focused on the cost disadvantage created by the need to
13 backhaul the traffic to the CLEC switch, while ILEC studies focused on the
14 "revenue opportunities" available. Compare TRO ¶ 481 and ¶ 482. The FCC
15 ultimately determined that none of the studies was sufficient to "form a basis for
16 making a national finding of no impairment, or a finding of impairment on the
17 basis of non-hot cut factors alone." *Id.* at ¶485. The FCC did conclude,
18 however, that it was "persuaded that other economic factors, in addition to the
19 economic and operational barriers associated with the current hot cut process that
20 we have already identified, may make entry uneconomic without access to the
21 incumbent's switch." TRO ¶ 484. Accordingly, the FCC found that the studies
22 before it "strongly support the need for a more granular analysis of impairment ...
23 Such an analysis would require complete information about UNE rates, retail

1 rates, other revenue opportunities, wire center sizes, equipment costs, and other
2 overhead and marketing costs.” TRO ¶ 485.

3 **Q. WHAT COSTS OTHER THAN THE BACKHAUL COSTS ARE**
4 **RELEVANT TO AN ANALYSIS OF “ECONOMIC IMPAIRMENT”?**

5 A. The FCC identified several additional types of costs. They included: the cost of
6 purchasing and installing a switch; the recurring and non-recurring charges paid
7 to the incumbent LEC for loops, collocations, transport, hot cuts, OSS, signaling,
8 and other services and equipment necessary to access the loop; the cost of
9 collocation and equipment necessary to serve local exchange customers in a wire
10 center, taking into consideration an entrant’s likely market share, the scale
11 economies inherent to serving a wire center, and the line density of the wire
12 center; the cost of backhauling the local traffic to the competitor’s switch; other
13 costs associated with transferring the customer’s service over to the competitor;
14 the impact of churn on the cost of customer acquisitions; the cost of maintenance,
15 operations, and other administrative activities; and the competitors’ capital costs.
16 TRO ¶ 520.

17 The FCC also noted that an economic impairment analysis should take
18 into account the impact of scale economies and line densities on the costs incurred
19 by ILECs and CLECs. TRO ¶ 520. Because many of the costs of providing local
20 telecommunications services are fixed at some level, ILECs begin their efforts to
21 compete with a unit cost advantage that CLECs cannot overcome without
22 capturing sufficient market share. Even if it is theoretically possible for a CLEC
23 to reduce its costs over time by achieving a significant market share, it cannot do
24 so immediately. This time dimension is extremely important. The CLEC must

1 make an investment that represents a significant fixed cost before serving any
2 customers at all, and then must hope that it will achieve a threshold market share
3 that makes the investment economically viable.

4 **Q. CAN A COST DISPARITY ALONE CREATE IMPAIRMENT?**

5 A. Yes, depending on which of the categories of cost creates the cost disadvantage.
6 A disparity in the level of the costs that both the ILEC and CLEC must incur
7 (assuming the CLEC can achieve the same scale economies as the ILEC) may not
8 create impairment because an efficiently operating CLEC could overcome this
9 cost disparity – over time – if it could achieve the necessary scale of operations.
10 In direct contrast, any costs that a CLEC must incur that the ILEC, as the
11 incumbent monopoly provider, avoids do create impairment. The necessity of
12 recovering backhaul-related costs and the inability of a CLEC to achieve the same
13 scale economies as the ILEC in a given market both fall into this category. As I
14 will explain below, no CLEC can “grow out of” this kind of cost disadvantage,
15 and the resulting impairment cannot be overcome, and the resulting impairment
16 cannot be eliminated merely by a broadening of the analysis to consider revenue
17 opportunities.

18 **Q. WHAT REVENUES ARE RELEVANT TO AN ANALYSIS OF**
19 **“ECONOMIC IMPAIRMENT”?**

20 A. After reviewing the studies presented by both ILECs and CLECs, the FCC found
21 that revenue assumptions have a “significant impact” on the results. TRO ¶ 485.
22 In its analysis, the FCC noted that “[t]he revenue estimates, which depend on
23 customers’ predicted expenditures on local voice service, were particularly
24 controversial, and appear to have had a significant impact on the results.” *Id.* The

1 potential revenues include the basic retail price charged to the customer, the sale
2 of vertical features, universal service payments, access charges, subscriber line
3 charges, and, if any, toll revenues” TRO ¶ 519.

4 The FCC’s focus on “predicted” or “potential” revenues is an important
5 consideration. A CLEC that elects to invest in its own local switching facilities to
6 serve mass market customers must recover the cost of those facilities over time
7 from the revenues received from these customers. Prior to making such a
8 substantial investment, a prudent CLEC will consider not only current revenue
9 levels but also likely changes in those levels over time.

10 Some revenue changes may be predicted from current market trends. For
11 example, it would clearly not be prudent for a CLEC to base its investment
12 decision on an expectation of higher toll revenues in the future. Other revenue
13 changes can be predicted by considering the operation of competitive market
14 forces. Successful entry by a CLEC, particularly a CLEC that manages to
15 increase its market share over time, will certainly inspire a competitive pricing
16 response by the ILEC. As the FCC correctly noted, a market that is currently
17 characterized by high rates and low costs is most likely to support self-
18 provisioning of a switch by a CLEC to serve mass market customers. TRO ¶ 484
19 and n. 1499. It is important to recognize, however – and a prudent CLEC
20 considering an investment of the scale of a circuit switch would certainly do so –
21 that high prices and low costs do *not* represent a relationship that is likely to be
22 maintained in an effectively competitive market. By definition, effectively
23 competitive markets do not have such relationships. It is essential, therefore, for a

1 CLEC to consider the potential revenues it would receive – and how the level of
2 those potential revenues can be expected to change over time –when deciding
3 whether to use its own local circuit switching equipment to serve mass market
4 customers. Such a consideration is fully consistent with the FCC’s conclusion
5 that when “judging whether entry is economic,” states must consider how
6 “competitive risks affect the likelihood of entry.” TRO ¶ 517.

7 **Q. YOU STATED PREVIOUSLY THAT THE CLECS’ COST**
8 **DISADVANTAGE CREATED BY THE NEED TO BACKHAUL TRAFFIC**
9 **FROM THE LOOP AGGREGATION POINT TO ITS SWITCH IS**
10 **SUFFICIENT TO ESTABLISH ECONOMIC IMPAIRMENT. WHY**
11 **CAN’T OTHER REVENUES OFFSET THIS COST DISADVANTAGE?**

12 A. The potential for “offsetting revenues” is effectively eliminated by an undisputed
13 fact: mass market revenue opportunities are the same for both ILECs and CLECs.
14 If revenue opportunities are the same and CLECs have higher costs as a result of
15 need to backhaul all of their customers’ loops and/or from the inability to fully
16 realize the ILEC’s economies of scale, ILECs will always be able to underprice
17 the CLECs if they choose to do so. This is a point that cannot be ignored: an
18 efficient CLEC that experiences a cost disadvantage cannot compete on price over
19 time, and therefore cannot prudently invest in assets whose costs can only be
20 recovered over an extended period of time.

21 Even if it could be shown a CLEC could use self-deployed local circuit
22 switching to serve mass market customers in a given area at current retail prices,
23 it could not rationally make the investment if it were also aware that it could be
24 priced out of the market before recovering its investment.

1 In contrast, access to local circuit switching as a UNE, particularly
2 because of its extremely important function of providing the CLEC access to
3 voice grade local loops at the place where they are aggregated, puts ILECs and
4 CLECs on a reasonably equal footing (the ILEC doesn't get an artificial
5 competitive advantage as the first in, former monopoly provider). ILECs and
6 CLECs can then compete based on the costs that they do control.

7 **Q. DOES THE REGULATORY FLEXIBILITY ENJOYED BY THE ILEC**
8 **IMPACT THIS EQUATION?**

9 A. Yes. The ability of an ILEC to easily make price changes underscores the
10 temporary nature of any market that is currently characterized by high prices and
11 low costs. An ability to decrease the price charged to all mass market customers
12 means that the ILEC can underprice a CLEC that has invested in its own local
13 circuit switching facilities. An ability to target the price reduction only to those
14 mass market customers that have been or are likely to be lost (through a so-called
15 win-back offering, for example) puts the ILEC in an even better position: it can
16 underprice the CLEC where necessary to recapture and retain customers, and can
17 do so without incurring the cost of offering the price reduction to all customers in
18 the area.

19 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

20 A. Yes.